



National Transportation Safety Board Aviation Incident Final Report

Location:	BOSTON, MA	Incident Number:	IAD03IA007
Date & Time:	10/19/2002, 0850 EDT	Registration:	N607UA
Aircraft:	Boeing 767-222	Aircraft Damage:	Minor
Defining Event:		Injuries:	128 None
Flight Conducted Under:	Part 121: Air Carrier - Scheduled		

Analysis

The Boeing 767 struck three birds during the initial climb out from runway 22. One double-crested cormorant was ingested by the #2 engine, another struck the right wing, and a third bird was found seriously injured on the runway. The airplane returned to the airport and landed uneventfully. Examination revealed damage to the right inboard leading edge slat, landing light, and the #2 engine bypass stator vanes. A review of the airport's Wildlife Hazard Management Plan revealed that on the morning of the incident, two wildlife technicians reported "heavy bird activity" to the control tower. The airport's Automated Terminal Information System (ATIS) was then updated to reflect the hazard, and was still active at the time of the incident. Prior to the airplane's take-off, one of the wildlife plan supervisors reported a flock of birds to the control tower and said they were flying about 200 feet over the approach end of runway 15, moving southbound. A tower controller responded that they had the birds in sight. Shortly thereafter, another airplane departed runway 22 without incident, then the incident airplane took off. A review of air traffic control communications revealed that no specific warning was given by the air traffic controllers to either of the crews, due to the fact that the birds were not in their flight path. It was believed that the flock then split into two or three separate flocks after the other airplane took off, with one of the flocks turning east and directly into the path of the incident airplane.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this incident to be: An inadvertent collision with birds during the initial climb out.

Findings

Occurrence #1: IN FLIGHT COLLISION WITH OBJECT
Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings

1. (C) OBJECT - BIRD(S)

Factual Information

On October 19, 2002, about 0850 eastern daylight time, a Boeing 767-222, N607UA, operating as United Airlines flight 185, sustained minor damage when it struck birds on takeoff from General Edward Lawrence Logan International Airport (BOS), Boston, Massachusetts. The airplane sustained minor damage. The captain, first officer, 7 flight attendants, and 119 passengers were not injured. The flight was operating on an instrument flight rules flight plan to San Francisco International Airport (SFO), San Francisco, California. The scheduled passenger flight was conducted under 14 CFR Part 121.

The airplane departed runway 22R, and struck the birds during the initial climbout. One double-crested cormorant was ingested by the #2 engine, another struck the right wing, and a third bird was found seriously injured on the runway. Even though the #2 engine was still producing power, the captain elected to shut it down as a precautionary measure. The airplane returned to Logan Airport and performed an overweight landing on runway 33L. The airplane was then towed to the gate, and the passengers deplaned normally.

Examination of the airplane revealed damage to the right inboard leading edge slat, landing light, and the #2 engine bypass stator vanes. Some of the vanes exited the forward section of the cowling at the 9 o'clock and 12 o'clock position.

The Massachusetts Port Authority (Massport), the public authority that managed Logan Airport, had a Wildlife Hazard Management Plan in place at the airport. The plan included regular, daily inspections of the runways and airport environment. On the morning of the incident, after examination of the airport perimeter, two Massport wildlife technicians reported "heavy bird activity" to the control tower, which was standard operating procedure. The Automated Terminal Information System (ATIS) was then updated to reflect this hazard, and was still active at the time of the incident.

Prior to flight 185's take-off, one of the wildlife plan supervisors reported a flock of birds to the control tower on 128.8, the tower frequency for runway 22. The supervisor reported the birds were flying about 200 feet over the approach end of runway 15, and were moving southbound. A tower controller responded that they had the birds in sight.

Shortly thereafter, a Delta Airlines Boeing 737 departed runway 22 without incident, followed by United Airlines flight 185.

A review of air traffic control communications revealed that no specific warning was given by the air traffic controllers to the Delta or United Airlines crews, due to the fact that the birds were not in their flight path. It was believed that the flock then split into two or three separate flocks after the Delta airplane took off, with one of the flocks turning east and directly into the path of the departing United airplane.

When asked if something could have been done to avoid this incident, a Massport wildlife representative answered "no." Moreover, no changes were made to the Massport Wildlife Hazard Management Plan.

Weather at the time included winds from 200 degrees at 9 knots, visibility 10 statute miles, broken clouds at 8,500 feet, overcast clouds 12,000 feet, temperature 50 degrees F, and dewpoint 41 degrees F.

Aircraft and Owner/Operator Information

Aircraft Make:	Boeing	Registration:	N607UA
Model/Series:	767-222	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Transport	Serial Number:	21868
Landing Gear Type:	Retractable - Tricycle	Seats:	
Date/Type of Last Inspection:		Certified Max Gross Wt.:	
Time Since Last Inspection:		Engines:	2 Turbo Fan
Airframe Total Time:		Engine Manufacturer:	Pratt & Whitney
ELT:	Installed, not activated	Engine Model/Series:	JT9-74RD
Registered Owner:	UNITED AIR LINES INC	Rated Power:	
Operator:	UNITED AIR LINES INC	Operating Certificate(s) Held:	Flag carrier (121)
Operator Does Business As:		Operator Designator Code:	UALA

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	BOS, 20 ft msl	Distance from Accident Site:	
Observation Time:	0854 EDT	Direction from Accident Site:	
Lowest Cloud Condition:		Visibility	10 Miles
Lowest Ceiling:	Broken / 8500 ft agl	Visibility (RVR):	
Wind Speed/Gusts:	9 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	200°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.06 inches Hg	Temperature/Dew Point:	10° C / 5° C
Precipitation and Obscuration:			
Departure Point:	BOSTON, MA (BOS)	Type of Flight Plan Filed:	IFR
Destination:	SAN FRANCISCO, CA (SFR)	Type of Clearance:	IFR
Departure Time:	0850 EDT	Type of Airspace:	Class D

Airport Information

Airport:	LOGAN INTERNATIONAL AIRPORT (BOS)	Runway Surface Type:	Asphalt
Airport Elevation:	20 ft	Runway Surface Condition:	Dry
Runway Used:	33L	IFR Approach:	None
Runway Length/Width:	10081 ft / 150 ft	VFR Approach/Landing:	Precautionary Landing

Wreckage and Impact Information

Crew Injuries:	9 None	Aircraft Damage:	Minor
Passenger Injuries:	119 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	128 None	Latitude, Longitude:	42.375000, -71.002778

Administrative Information

Investigator In Charge (IIC):	LEAH D YEAGER	Report Date:	08/26/2003
Additional Participating Persons:	JOHN TAMBOURI; BOSTON FSFO; BOSTON, MA		
Publish Date:			
Investigation Docket:	NTSB accident and incident dockets serve as permanent archival information for the NTSB's investigations. Dockets released prior to June 1, 2009 are publicly available from the NTSB's Record Management Division at pubinq@ntsb.gov , or at 800-877-6799. Dockets released after this date are available at http://dms.nts.gov/pubdms/ .		

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